

REMARKS

Applicants hereby submit amended claims and argument, and request for the reconsideration and withdrawal of the rejections.

Rejection under 35 USC §101/112:

At page 2 of the Office Action, the Examiner rejected the claims under 35 U.S.C. §101/112. In summary, the Examiner stated that the claimed isolated nucleic acid molecules lack utility because Applicants have failed to point out a specific use.

In the Office Action, the examiner stated that the specification does not specifically disclose the function/activity of the protein consisting of SEQ ID NO: 2, its specific relationship to any disease and any enzyme assays which demonstrate that the protein of the invention has metalloprotease activity. The examiner also stated that no substantial utility was disclosed.

Applicants respectfully disagree with the Examiner.

As stated in the previous response to the Office Action, the protein of the present invention belongs to metalloprotease/disintegrin (ADAM) family, a subfamily of protease. The ADAMs are family of type I transmembrane glycoproteins that are important in diverse biologic processs, such as cell adhesion and proteolytic shedding of cell surface receptors

The protein of the present invention has high homology to a known metalloprotease/disintegrin protein (see Figure 2C) In addition, Hmmer search results (pfam.wustl.edu) on Figure 2E shows that the present invention has statistically significantly high homology to the zinc metalloprotease domains.

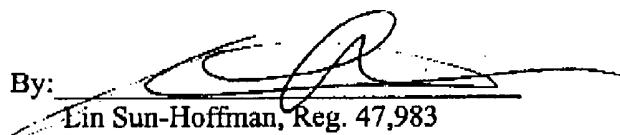
In view of the above, Applicants believe the present invention has utility and is enabled under 35 USC §101 and §112. Applicants respectfully requests the Examiner reconsider and withdraw the rejections of the claims, and issue a Notice of Allowance at the earliest convenience.

Respectfully submitted,
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